

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2022/2023

BAE2014 – SEMINAR IN ANALYTICAL ECONOMICS
(All Sections/Groups)

10 JULY 2023
9.00 am-11.00 am
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of **FOUR** pages with **FOUR** questions only.
2. Attempt **ALL FOUR** questions. The distribution of the marks for each question is given.
3. Please write all your answer in the Answer Booklet provided.

Answer all questions in the answer booklet provided.

Question One (25 marks)

Passage 1

ABSTRACT

Malaysia has pledged to reduce carbon emissions by 45% in year 2030 and to attain a completely carbon neutral status by year 2050. For those purposes, substantial measures and policies have been implemented geared towards green growth and sustainability, as stipulated in the 9th, 10th, and 11th Malaysia Plans commencing from 2006 until 2020. Nevertheless, it is indeed a challenge in striking to achieve these targets due to reported increment in the total final energy consumption by 30% from 2010 until 2014. Demand for electricity in Malaysia has been expected to surge between 5% and 6% within these couple of years in line with nation urbanisation and economic progression. As such, a number of macroeconomic indicators that might have influenced Malaysia's electrical consumption had been analysed for the 1970-2016 period by estimating electricity consumption per capita demand function linked with economic growth, foreign direct investment inflows, trade liberalisation, population growth, urbanisation population growth, financial development, industrialisation, inflation, and household consumption expenditure. The analysis was conducted by using the Autoregressive Distributed Lag model. The estimation outcomes revealed the roles of economic progression and urbanization that led to increment in electrical consumption, whereas financial deepening and higher inflation linked to reduction. Such results enlighten significant insights for policymakers. For instance, since electricity consumption rises with urbanisation, it is essential that energy-efficient appliances are made relatively affordable and readily available for urbanites. The central bank also should play its part by lowering the lending rates so as to allow the financial institutions across the nation to offer attractive loans with lower financing cost to firms associated to renewable energy. With more companies being involved in cleaner alternative energy production, the nation is deemed to minimise its carbon emissions by decreasing its dependence upon coal to generate electricity.

The Literature review:

The literature includes various studies that exclusively investigated the profiles of macroeconomic indicators. Jones and Lomas (2015) analysed the main factors that contributed to high demand of electrical energy. Some essential determinants that have been reported to significantly affect energy consumption are FDI inflows, trade openness (TO), economic growth, and human development index, Azam et al. (2015). These indicators have been tested profoundly to substantiate their correlation with energy consumption via econometric techniques. The authors concluded that FDI inflows and real gross domestic product (GDP) exerted positive relationships with energy consumption, while POP rate emerged as a significant determinant of energy consumption. Next, Ivy-Yap and Bekhet (2016) reported genuine correlations among residential electricity consumption, GDP, prices of electricity and electrical appliances, population, and FDI in Malaysia. The article probed into the important tools that measured the rapid growth in electricity consumption towards achieving better energy

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security. Magazzino (2015) performed a co-integration analysis and revealed a long-run relationship between GDP and energy consumption. Through the use of time series approach, the article concluded that energy consumption and economic growth complemented each other and boosted economic growth, which eventually surged energy consumption. Similarly, many studies have found the direct link between energy consumption and economic growth (Dogan, 2015; Karanfil, 2009; Alshehry and Belloumi, 2015; Salahuddin et al., 2015; Bhattacharya et al., 2016). Tang et al. (2016) investigated the relationship between energy consumption and economic growth from the lens of neoclassical Solow growth framework in Vietnam. Alper and Oguz (2016) observed the causality amongst economic growth, renewable energy consumption, capital, and labour by employing asymmetric causality test approach and autoregressive distributed lag (ARDL). The results indicated the positive impact of renewable energy consumption upon economic growth. Other studies have documented unidirectional causality that ran from energy consumption and CO2 to real income in both long- and short-run.

Source: Abdul R. The title of this article is not provided due to the nature of the exam question. International Journal of Energy Economics and Policy, 2020, 10(1), 16-22.

Based on **Passage 1**, answer the following questions.

- (a) Find a suitable title for **Passage 1**. The title should convey the main findings of the research. (5 marks)
- (b) Identify any **Four** variables that were used in this study. (5 marks)
- (c) Based on the Literature Review section, determine the model specification of this paper. (7 marks)
- (d) Based on your answer in (c), evaluate the preliminary data analysis that could be employed to conduct the study. (8 marks)

Question Two (25 marks)

- (a) Analyse **FIVE (5)** questions to ask when you review past literatures for a research. (15 marks)
- (b) Determine the systematic analytical steps followed by academicians who wish to publish an **econometric analysis of economic models** in diagram. (10 marks)

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Question Three (25 marks)**ABSTRACT**

The purpose of the present study analysis is to empirically examine the impact of various environmental factors on the tourism industry in Indonesia. To achieve this objective, data is collected from World Development Indicators during the time of 1996-2016 under the title of environmental factors as defined by the experts of the world bank. A time of 22 years has been finalized for the predictors of tourism industry like forest area (FA), population growth, energy use, agriculture, forestry and fishing along with CO2 emissions. Both descriptive and regression analysis techniques have been applied while adding the lagged predictors of both tourism industry and environmental factors. Eight regression models have been developed and results are generated through statistical tools like STATA-14. Findings of the study indicate that FA and population growth are the significant determinants of the tourism industry. Among the lagged predictors, international tourism (lagged), Nitrous oxide emissions, and lagged values of FA are significantly affecting international tourism receipt (ITR) in the region of Indonesia. For the 2nd proxy; tourism expenditures, the key determinants under model 5–8 are, international tourism (lagged), Nitrous oxide emissions (lagged), CO2 emission (lagged) and population growth. As per the practical implications, this study is very much useful for both the industry experts and policymakers at macro-level. Considering the set of factors as explained in the present study will provide new insight regarding sustainable development through environmental factors of the tourism industry. However, the key limitations are the lack of advance time series investigation, ignoring the impact of macroeconomic indicators and cross region analysis.

Source: Andriansyah, International Journal of Energy Economics and Policy Vol 9(3) ,360-365 2019.

Based on **Passage 1**, answer the following questions.

- (a) Find a suitable title for **Passage 1**. The title should convey the main findings of the research. (5 marks)
- (b) Identify dependent and independent variables will be used in this study. (10 marks)
- (c) Based on your suggestion (b) Analyse the econometric methods that could be employed to conduct this study. (10 marks)

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Question Four (25 marks)

- (a) Evaluate the **THREE (3)** purposes of Social Science Research. (10 marks)
- (b) Analyse the **THREE (3)** types of reasoning found in Research. (15 marks)

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